May 9, 2003

TO: Internal File

THRU: Daron Haddock, Permit Supervisor

FROM: James D. Smith

RE: Mid-term review, PacifiCorp, Des-Bee-Dove Mine, C/015/017-MT03

SUMMARY:

Appendices XIV and XV, incorporated into the MRP within the last year, are the current reclamation plan for the Des-Bee-Dove Mine. The Permittee has completed backfilling, grading, seeding, and hydromulching of the Phase 1 area (Appendix XIV) and is currently doing the same work in the Phase 2 area (Appendix XV).

The Division is required to review each active permit during its term, in accordance with R645-303-211. This review takes place at the midpoint of the permit term (February 28, 2003 for the Des-Bee Dove Mine) and is to cover pertinent elements that have been selected for review. Items chosen for the midterm review for the Des-Bee-Dove Mine included:

1. An AVS check to ensure that Ownership and Control information is current and correct.
2. A review of the plan to ensure that the requirements of all permit conditions, division orders, notice of violation abatement plans, and permittee initiated plan changes are appropriately incorporated into the plan document.
3. A review of the applicable portions of the permit to ensure that the plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.
4. A review of the bond to ensure that it is in order and that the cost estimate is accurate and is escalated to the appropriate year dollars.
5. A technical site visit by the Division in conjunction with the assigned compliance inspector to document the status and effectiveness of operational, reclamation, and contemporaneous reclamation practices.

Analyses in this Tech Memo relate to items 1, 2, 3, and 5.

The Division notified PacifiCorp of its intent to conduct a mid-term review of the Des-Bee-Dove Mine in a letter dated March 19, 2003. Mid-term reviews include a technical site visit, in conjunction with the assigned compliance inspector, to document the status and effectiveness of operational, reclamation, and contemporaneous reclamation practices. Dennis Oakley and the DOGM team members inspected the Des-Bee-Dove permit area on May 1, 2003, with emphasis on the current reclamation practices and best technology currently available (BTCA) for sediment control.

Sediment control consists of: the sedimentation pond; silt fencing, a catch basin, diversions, and a berm at the sub-soil stockpile at the sedimentation-pond; silt fencing and a catch basin at the switchback (below the gate) of the entry road that treats runoff from the road; vegetation and surface roughening with deep-pocking at the reclaimed pump-house area; and permanent diversions, vegetation, and surface roughening with deep-pocking for the Phase 1 and 2 reclaimed areas. Pocks at the pump-house area have already filled with sediment, but vegetation has become established and there is no evidence of contributions of sediment to streamflow or runoff outside the permit area.

Surface pocking is intended to be the primary sediment control method for reclamation. The sedimentation pond will be removed as soon as the pocking is shown to be effective in controlling sediment transport and preventing, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area. The Permittee hopes to remove the pond this year.

The pump-house area and access road were reclaimed in 2000. The Little Dove and Beehive portal pad area was reclaimed in 2001 - 2002 (Phase 1) and the Deseret portal pad, main tipple, bathhouse pad, and access roads are being reclaimed now (Phase 2). Reclamation practices consist of backfilling and regrading, placement of topsoils and topsoil substitutes with supplemental fertilizer, deep pocking, and hydroseeding and mulching. Plunge pools and a riprap channel are being built through the reclaimed area, along with several “armored” channels across recontoured slopes.

The permit was renewed in 2000. The only special condition to the permit was that water-monitoring data were to be submitted in electronic format after the fourth quarter of 2000, and the Permittee has complied with that condition. There is no active or outstanding Division order or notice of violation and therefore no abatement plan. All Permittee initiated plan changes have been appropriately incorporated into the plan document.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

Volume one of the Des-Bee-Dove MRP contains Ownership and Control information that was current as of December 2000: this information was incorporated into the MRP effective on November 26, 2001. Names of those who resigned or retired in 1999 or 2000 are included.

An Organizational Family Tree (OFT) was obtained through the Applicant Violator System (AVS) on April 16, 2003. There are numerous discrepancies between information in the MRP and that retrieved by the AVS. PacifiCorp has recently updated the Ownership and Control information in the Cottonwood/Wilberg Mine MRP and is in the process of updating it for the rest of the PacifiCorp mines, including Des-Bee-Dove.

Findings:

Ownership and Control information is out-of-date in the Des-Bee-Dove MRP, but revisions currently being prepared by PacifiCorp should bring this information up-to-date.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

An Applicant Violator System (AVS) check was done on April 16 2003. There were no violations retrieved by the system.

Findings:

As there are no violations, information on violations is current and correct.

OPERATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Diversions: General

Diversions that existed during operation of the Des-Bee-Dove Mine have been removed during reclamation.

Diversions: Perennial and Intermittent Streams

There are no perennial streams. The drainage is ephemeral, flowing only in response to rainfall or snowmelt, and the watershed above the reclaimed mine site and sedimentation pond is only approximately 300 acres. A riprapped permanent diversion is being constructed through the reclaimed site to carry runoff from the site and the surrounding undisturbed areas.

Diversions: Miscellaneous Flows

The drainage includes numerous small tributary channels that flow down the steep sides of the canyon. Where some of these channels cross the filled and recontoured areas they have been armored with rock to minimize erosion, but these armored channels have not been designed or built to meet a specified performance standard. The danger that flooding in these channels will result in damage to life, property, and the hydrologic balance is minimized because of the armoring, the small size of these miscellaneous drainages, the remoteness of this site, and the small amount of precipitation.

Sediment Control Measures

Additional contributions of suspended solids and sediment to streamflow or runoff outside the permit area are to be prevented to the extent possible using the BTCA. A sedimentation pond is generally considered the BTCA for sediment control, and the sedimentation pond has been and currently is the primary sediment control measure for the Des-Bee-Dove site.

Alternative sediment control measures are silt fencing, a catch basin, diversions, and a berm at the sub-soil stockpile at the sedimentation-pond; silt fencing and a catch basin at the switchback (below the gate) of the entry road that treats runoff from the road; vegetation and surface roughening with deep-pocking at the reclaimed pump-house area; and permanent diversions (reconstructed channels), vegetation, and surface roughening with deep-pocking for the Phase 1 and 2 reclaimed areas.

Pocks at the pump-house area have already filled with sediment, but vegetation has become established and there is no evidence of contributions of sediment to streamflow or to runoff outside the permit area.

Siltation Structures: General

The sedimentation pond was designed as the primary sediment control measure and is the only siltation structure. Because the pond is roughly 2,000 feet downstream of the disturbed area and because of the small amount of runoff, sediment from the Des-Bee-Dove disturbed area has rarely, if ever, reached the sedimentation pond.

Surface pocking and vegetation are intended to be the primary sediment control methods for reclamation. The sedimentation pond will be removed as soon as vegetation becomes established and the vegetation and pocking are shown to be effective in controlling sediment transport and preventing, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area. The Permittee hopes to remove the pond this year.

Siltation Structures: Sedimentation Ponds

The sedimentation pond is the only siltation structure. The pond is designed for total containment of a 10-year, 24-hour storm.

Siltation Structures: Other Treatment Facilities

There are no “other treatment facilities” at the Des-Bee-Dove Mine. The only UPDES point-source discharge is the water decanted from the sedimentation pond. The decant valve is leaking an estimated 5 to 10 gallons per hour, but the water evaporates or percolates into the channel bed within a few hundred yards of the decant outfall.

Siltation Structures: Exemptions

There are no exempt areas at the Des-Bee-Dove Mine.

Discharge Structures

The pond is designed for total containment of runoff from a 10-year, 24-hour precipitation event. The sedimentation pond is partially decanted through piping installed in the embankment, flow being controlled by a manually operated valve, but a pump must be used to completely decant the pond. The valve and pump control discharge so as to reduce erosion, prevent deepening or enlargement of stream channels, and minimize disturbance of the hydrologic balance, and also to hold TDS in the discharge stream below the one-ton/day UPDES limit. There is an emergency spillway of nonerodible, grouted riprap that was designed to safely discharge a 25-year, 24-hour precipitation event.

Impoundments

The sedimentation pond meets the requirements for impoundments. The catch basins retain less than one cubic-yard of water and are not considered impoundments regulated by the Coal Mining Rules.

Findings:

Information on the use of BTCA to prevent additional contributions of suspended solids to stream flows outside of the permit area is sufficient to meet the requirements of the Coal Mining Rules..

RECLAMATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Analysis:

Hydrologic Reclamation Plan

Surface pocking and vegetation are intended to be the primary sediment control methods for reclamation. The sedimentation pond will be removed as soon as vegetation becomes established and the vegetation and pocking are shown to be effective in controlling sediment transport and preventing, to the extent possible, additional contributions of sediment to

streamflow or to runoff outside the permit area. The Permittee hopes to remove the pond this year.

Findings:

Information on the use of BTCA to prevent additional contributions of suspended solids to stream flows outside of the permit area is sufficient to meet the requirements of the Coal Mining Rules.

RECOMMENDATIONS:

The recommendation is that, at this time, no further action be taken on the items covered in the midterm review.

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